estimates for freedom from moderate or severe AR (censored for death/heart transplant) were 85% (1 year), 71% (2 years) and 52% (3 and 4 years).
Conclusion: Increasing AR occurred during HVAD support despite avoidance strategies. Concomitant bioprosthetic AVR should be considered at implant if there is greater than mild AR and the expected duration of LVAD support is long.

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0461: COMPLIANCE WITH ANTICOAGULATION GUIDELINES FOLLOWING HEART VALVE SURGERY: LESSONS FROM FOUR CYCLES OF AUDIT

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Aim: Following heart valve surgery, patients often require long-term treatment with anticoagulation therapy; local evidence-based guidelines were developed for postoperative management. Several audit cycles have been completed to assess and improve compliance with these guidelines.
Method: Data was retrospectively collected from the local PATS database for the last consecutive 210 patients undergoing valve surgery. The standard was 100% compliance with the guidelines. Data from this audit cycle was compared with the previous three cycles.
Result: First cycle (2009): 80% of patients were treated according to the guidelines; recommended guidelines emphasised in the doctors' induction. Second cycle (2010): 90% according to the guidelines; recommended incorporating a drop-down box into the electronic discharge and displaying a guidelines poster in the doctors' office. Third cycle (2012): 81% according to the guidelines. Fourth cycle (2015): 69% according to the guidelines. Adherence was lowest in patients who had undergone mitral valve repair (36%) due to alternative use of antiplatelet agents.
Conclusion: Previous audit cycle implementations improved compliance with local guidelines but there is now significant deviation. The use of antiplatelet agents after mitral valve repair is now recommended in the latest AHA/ACC guidance (2014) and differs from our current local guidelines which now require updating.

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0486: A COMPARISON OF TRANSCATHETER AORTIC VALVE IMPLANTATION AGAINST CONVENTIONAL THERAPIES IN THE TREATMENT OF SEVERE AORTIC STENOSIS IN RISK PATIENTS

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Aim: The present literature review aims to explore and compare the application of transcatheter aortic valve replacement (TAVI) against conventional therapies in the treatment of severe aortic stenosis (AS) in patients of varying operative risk.
Method: An electronic search was performed on 4 databases to identify comparative studies on TAVI vs. conventional therapies. All-cause mortality was the primary outcome. Procedural outcomes such as stroke, vascular complications and major bleeding were determined as secondary outcomes.
Result: 17 pertinent studies were included. TAVI significantly reduced all-cause mortality at all time points over follow-up compared with standard therapy in inoperable patients, although it was associated with increased vascular complications and stroke. All-cause mortality was comparable between TAVI and surgical aortic valve replacement (SAVR) in high-risk and lower than high-risk patients. Quality-of-life data demonstrated the superiority of TAVI over standard therapy in inoperable patients; it showed no significant difference between TAVI and SAVR.
Conclusion: For the treatment of severe AS, TAVI may be recognised as an effective alternative to standard therapy for inoperable patients. TAVI has also established itself as an effective intervention in high-risk and lower than high-risk patients with outcomes comparable with SAVR.

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0495: APROTININ FOR REDUCTION OF POST-OPERATIVE BLOOD LOSS AND INCIDENCES OF CEREBROVASCULAR EVENTS FOLLOWING ENDOCARDITIS SURGERY. A PILOT STUDY

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Aprotinin has shown to be efficacious in cardiac surgeries involving high blood loss. There is strong evidence indicating it effectively reduces post-operative blood loss and the need for blood transfusion following surgery. Evidence is however, limited in relation to the potential benefits/risks of aprotinin in open-heart endocarditis surgery.
Aim: To determine whether aprotinin reduces post-operative bleeding following endocarditis surgery, compared to conventional techniques.
Method: In this retrospective study, data from 50 patients who underwent endocarditis surgery from 2011-15, was analysed comparing 24-hour post-operative blood loss, kidney function and cerebrovascular events. Comparisons of aprotinin vs. control (tranexamic acid) were undertaken with; paired t-test, Mann-Whitney U test, Kruskal-Wallis test and Chi-squared analysis.
Result: Blood loss over 24 hours was found to be lower in the group given aprotinin, with a significant difference seen at 6 and 12 hours post-operatively ($p=0.03$). The need for blood transfusion was also seen to be lower in the aprotinin arm ($RR = 0.875$, 95% $CI = 0.55\text{-}1.38$ $p = 0.09$).
Conclusion: This pilot study highlights potential benefits of aprotinin to reduce post-operative blood loss and transfusion requirement in endocarditis surgery, This is only a snapshot but suggests that the study methodology employed is viable to a much larger study with increased power.

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0834: CLINICAL CASE FOCUSING ON CARDIAC IMAGING AND TUMOUR CHARACTERISATION OF A CARDIAC PAPILLARY FIBROELASTOMA

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Background: Cardiac papillary fibroelastoma (CPF) is a rare cardiac tumour. Although non-malignant, these tumours can cause significant morbidity and even death through embolization and mass effects. Previous meta-analysis has advocated surgical intervention in those with highly mobile or symptomatic tumours. Assessing mobility of cardiac structures requires clear and accurate imaging, of which multiple modes are available. This paper presents a case of CPF with a focus on cardiac imaging and tumour characterization.
Case: A 74 year old gentleman was referred by his general practitioner for a transthoracic echogardiogram because of severe hypertension. This revealed a 1cm mass in the left ventricle. Further imaging was performed including transoesophageal echocardiogram and cardiac magnetic resonance imaging. This characterised the mass as a highly mobile CPF. Despite the lack of symptoms that could be attributed to the tumour, it was excised on the grounds of high thromboembolic risk. This was done on an elective outpatient basis and he made a straightforward recovery.
Discussion: Primary cardiac tumours have an incidence of approximately 0.02%. Unlike the more common cardiac myxoma, the case for surgical resection of CPF is less clear cut. In our case the decision to excise the tumour was made on the grounds of tumour mobility.

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